## **CLAIMS**

10

lu Lu

## What is claimed is:

1. A file structure for storing a content object having a plurality of content entities, comprising:

a file object containing a list of content entity identifiers defining the content of the content object; and

a plurality of file objects, each containing a content entity.

- 2. The file structure of claim 1 further comprising an attribute file object containing at least one attribute pertaining to the content object.
- 3. The file structure of claim 1, wherein at least one attributes is extracted from the content object.
- 4. The file structure of claim 1, wherein ones of the content entities further comprise components associated with the content object, and further comprising one or more associated component file objects.
- 5. The file structure of claim 1, wherein the content object is one of a book, a collection of images, an album, and a video.
- 25 6. The file structure of claim 1, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
  - 7. The file structure of claim 4, wherein at least one of the associated components comprises an image.

30

STL000022US1

-148-



- 8. A file structure for storing a hierarchically structured content object having a plurality of content entities, comprising the step of:
- a first file object containing an outline of containers and content entity identifiers defining the content and hierarchical structure of the content entity; and

a plurality of file objects, each containing a content entity.

- 9. The file structure of claim 8, further comprising an attribute file object containing at least one attribute pertaining to the content object.
  - 10. The file structure of claim 8, wherein at least one attributes is extracted from the content object.
  - 11. The file structure of claim 8, wherein ones of the content entities further comprise components associated with the content object, and further comprising one or more associated component file objects.
  - 12. The file structure of claim 8, wherein the content object is one of a book, a collection of images, an album and a video.
  - 13. The file structure of claim 8, wherein the content object is a book and the containers are one or more of a book, a volume, or a chapter.
- 25 14. The file structure of claim 8, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
  - 15. The file structure of claim 11, wherein at least one of the associated components comprises an image.

6. A method for providing a file structure for storing a content object having a plurality of content entities, comprising the steps of:

creating a file object containing a list of content entity identifiers defining the content of
the content object; and
creating a planality of file objects, each containing a content entity.

- 17. The method of claim 16, further comprising the step of creating an attribute file object containing at least one attribute pertaining to the content object.
- 18. The method of claim 16, wherein at least one attributes is extracted from the content object.
- 19. The method of claim 16, wherein ones of the content entities further comprise components associated with the content object, and further comprising the step of creating one or more associated component file objects.
- The method of claim 16, wherein the content object is one of a book, a collection of images, an album, and a video.
- 21. The method of claim 16, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
- 22. The method of claim 19, wherein at least one of the associated components comprises an image, a video segment, or an audio segment.

\_\_\_\_

10

8

10

145

- A method for storing a hierarchically structured content object having a plurality of content entities, comprising the steps of:
- creating a first file object containing an outline of containers and content entity identifiers

  defining the content and hierarchical structure of the content entity; and

creating a plurality of file objects, each containing a content entity.

- 24. The method of claim 23, further comprising the step of creating an attribute file object containing at least one attribute pertaining to the content object.
  - 25. The method of claim 23, wherein at least one attributes is extracted from the content object.
  - 26. The method of claim 23, wherein ones of the content entities further comprise components associated with the content object, and further comprising the step of creating one or more associated component file objects.
  - 27. The method of claim 23, wherein the content object is one of a book, a collection of images, an album, and a video.
  - 28. The method of claim 23, wherein the content object is a book and the containers are one or more of a book, a volume, or a chapter.
- 25 29. The method of claim 23, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
  - 30. The method of claim 26, wherein at least one of the associated components comprises an image, a video segment or an audio segment.

4.20 14.20 14.30 1

- 31. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing a file structure for storing a content object having a plurality of content entities, comprising the steps of:
- creating a file object containing a list of content entity identifiers defining the content of the content object; and creating a plurality of file objects, each containing a content entity.
- 32. The method of claim 31, further comprising the step of creating an attribute file object containing at least one attribute pertaining to the content object.
  - 33. The method of claim 31, wherein at least one attributes is extracted from the content object.
  - 34. The method of claim 31, wherein ones of the content entities further comprise components associated with the content object, and further comprising the step of creating one or more associated component file objects.
  - 35. The method of claim 31, wherein the content object is one of a book, a collection of images, an album, and a video.
  - 36. The method of claim 31, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
- 25 37. The method of claim 34, wherein at least one of the associated components comprises an image, a video segment, or an audio segment.

25

- 38. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for storing a hierarchically structured content object having a plurality of content entities, comprising the steps of:
- 5 creating a first file object containing an outline of containers and content entity identifiers defining the content and hierarchical structure of the content entity; and

creating a plurality of file objects, each containing a content entity.

- 10 39. The method of claim 38, further comprising the step of creating an attribute file object containing at least one attribute pertaining to the content object.
  - 40. The method of claim 38, wherein at least one attributes is extracted from the content object.
  - 41. The method of claim 38, wherein ones of the content entities further comprise components associated with the content object, and further comprising the step of creating one or more associated component file objects.
  - 42. The method of claim 38, wherein the content object is one of a book, a collection of images, an album, and a video.
  - 43. The method of claim 38, wherein the content object is a book and the containers are one or more of a book, a volume, or a chapter.
  - 44. The method of claim 38, wherein the content object is a book and ones of the content entities are one of volumes, chapters or sections.
- 45. The method of claim 41, wherein at least one of the associated components comprises an image, a video segment or an audio segment.

STL000022US